



*Morgantown, WV*

## **Federal Energy Technology Center (FETC)**

**Site Description:** FETC was formed in December 1996 by merging Pittsburgh Energy Technology Center (coal research) and Morgantown Energy Technology Center (gas research). The two, located 65 miles apart, have been involved in fossil energy research for the past 50 years and were merged under single management by the U.S. Department of Energy (DOE) to eliminate redundant activities and cut costs.

**Mission:** FETC promotes research for solving national energy and environmental problems by using fossil energy resources, including coal and gas. FETC also works with industry in developing technologies for solving DOE environmental cleanup problems at sites where nuclear weapons were designed and manufactured. In addition to performing and partnering in research, development, and demonstration projects that advance resulting technologies into the commercial marketplace, FETC is an administrative clearinghouse of research funds for the Office of Environmental Management (EM).

**Management:** FETC is a government-owned, government-operated site. It is administered directly by the Office of Fossil Energy (FE). FETC has a total of 550 Federal employees and 550 support contractor staff, roughly half at each site. Lead contractors are EG&G Services, Parsons Infrastructure and Technologies Group, Inc., SAIC Corporation, and Concurrent Technology Corporation. Federal employees conduct in-house research; specific support tasks are performed by contractor staff. In partnership with industry, universities, and not-for-profit organizations, FETC supervises nearly 700 research, development, and demonstration projects at FETC and in 49 states and foreign countries, including India, Poland, Ukraine, Brazil, South Africa, and South Korea.

FETC is responsible for R&D programs in low-emission boiler systems, high-performance power systems, flue gas cleanup, coal preparation, alternative coal mixture and slurry fuels, coal science, integrated gasification combined cycle power systems, pressurized fluidized-bed combustion, advanced gas turbines, fuel cells, fossil fuel, and environmental waste management.

As DOE's EM Center for Acquisition and Business Excellence, FETC provides acquisition planning and policy support to EM and serves as a clearinghouse for best practices and lessons-learned relative to EM privatization projects. Many cleanup projects at DOE's nuclear weapons facilities and other sites require development of new technology. Under the EM program, FETC is working through partnerships with private sector and other DOE offices on nuclear, hazardous, and fossil fuel waste cleanup, and on facility decontamination and decommissioning activities.



*Pittsburgh, PA*

**Budget:** The annual budgets for FY 1999 and FY 2000 are \$352.7 million and \$375 million, respectively.

**Integrated Safety Management (ISM) Implementation Status:** An FE review of ISM in 1998 revealed a lack of worker involvement in determining standards to control hazards. A corrective action plan has been implemented. ISM verification is scheduled to be completed by May 2000.

**Significant Past Events:** No significant environment, safety and health events have been reported in the DOE Occurrence Reporting and Processing System (ORPS) in the past two years at FETC.

### Key Facilities

Facility Name	Mission/Status	Principal Hazards
Combustion and Environmental Research Facility (FETC-Pittsburgh)	Flue gas cleanup Operational	High temperature, fuel handling, toxic gas generation.
Clean Fuels (FETC-Pittsburgh)	Lab, bench-scale, and process development and simulation research on Fischer-Tropsch fuels Operational	Hazardous chemicals.
Hydrogen Production and Storage (FETC-Pittsburgh)	Lab and bench scale research on hydrogen production, separation, and storage. Operational	Explosion, high pressure.
Carbon Sequestration (FETC- Pittsburgh)	Laboratory and bench scale research on ocean, geological, and biological methods Operational	High pressure, biological hazards.
Hazardous Air Pollutants (FETC- Pittsburgh)	Bench-scale testing of mercury measurement and removal, ambient PM 2.5 monitoring and research Operational	Particles, hazardous materials.
Fuel cells and hybrid cycles (FETC-Morgantown)	Lab, simulation, and bench-scale Operational	High voltage, hazardous gases and materials.
Gas Stream Cleanup (FETC-Morgantown)	Lab, bench-scale, and process development. Unit-scale testing of sorbents, filters, and processes Operational	High temperature, high pressure, and hazardous gases and materials.

**For the FETC ES&H Manager's Office, contact (304) 285-4607**